#32 1600

CRF Errors Corrected by the STIC Systems Branch

Serial Number: 09/147,405B ENTERED

CRF Processing Date: 2/12/2003
Edited by:
Verified by: (STIC staff)

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____.
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____.
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☑ Other: Seq. 15 - corrected amino acid numbering

RECEIVED
FEB 19 2003
TECH CENTER 1600/2900

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

32

1600

RAW SEQUENCE LISTING DATE: 02/12/2003
PATENT APPLICATION: **US/09/147,405B** TIME: 18:36:20

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\02112003\I147405B.raw**

```
      3 <110> APPLICANT: Guss, Bengt
      4       Nilsson, Martin
      5       Frykberg, Lars
      6       Flock, Jan-Ingmar
      7       Lindberg, Martin
      9 <120> TITLE OF INVENTION: Fibrinogen Binding Protein Originating from
     10       Coagulase-Negative Staphylococcus
     12 <130> FILE REFERENCE: guss 09/147405
     14 <140> CURRENT APPLICATION NUMBER: 09/147405B
C--> 15 <141> CURRENT FILING DATE: 1999-04-11
     17 <150> PRIOR APPLICATION NUMBER: PCT/SE97/10191
     18 <151> PRIOR FILING DATE: 1997-06-18
     20 <150> PRIOR APPLICATION NUMBER: SE 9602496-3
     21 <151> PRIOR FILING DATE: 1996-06-20
     23 <160> NUMBER OF SEQ ID NOS: 15
     25 <170> SOFTWARE: PatentIn Ver. 2.0
     27 <210> SEQ ID NO: 1
     28 <211> LENGTH: 20
     29 <212> TYPE: DNA
     30 <213> ORGANISM: Artificial Sequence
     32 <220> FEATURE:
     33 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
     35 <400> SEQUENCE: 1
     36 caacaaccat ctcacacaac                                              20
     39 <210> SEQ ID NO: 2
     40 <211> LENGTH: 22
     41 <212> TYPE: DNA
     42 <213> ORGANISM: Artificial Sequence
     44 <220> FEATURE:
     45 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
     47 <400> SEQUENCE: 2
     48 catcaaattg atatttccca tc                                           22
     51 <210> SEQ ID NO: 3
     52 <211> LENGTH: 18
     53 <212> TYPE: DNA
     54 <213> ORGANISM: Staphylococcus epidermidis
     56 <220> FEATURE:
     57 <221> NAME/KEY: variation
     58 <222> LOCATION: (3)
     59 <223> OTHER INFORMATION: n is c or t
     61 <220> FEATURE:
     62 <221> NAME/KEY: variation
     63 <222> LOCATION: (6)
```

RAW SEQUENCE LISTING DATE: 02/12/2003
PATENT APPLICATION: **US/09/147,405B** TIME: 18:36:20

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\02112003\I147405B.raw**

64 <223> OTHER INFORMATION: n is c, t, a, or g
66 <220> FEATURE:
67 <221> NAME/KEY: variation
68 <222> LOCATION: (9)
69 <223> OTHER INFORMATION: n is c or t
71 <220> FEATURE:
72 <221> NAME/KEY: variation
73 <222> LOCATION: (12)
74 <223> OTHER INFORMATION: n is c, t, a, or g
76 <220> FEATURE:
77 <221> NAME/KEY: variation
78 <222> LOCATION: (15)
79 <223> OTHER INFORMATION: n is c or t
81 <220> FEATURE:
82 <221> NAME/KEY: variation
83 <222> LOCATION: (18)
84 <223> OTHER INFORMATION: n is c or t
86 <400> SEQUENCE: 3
W--> 87 **gantcngant cnganagn** 18
90 <210> SEQ ID NO: 4
91 <211> LENGTH: 19
92 <212> TYPE: DNA
93 <213> ORGANISM: Artificial Sequence
95 <220> FEATURE:
96 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
98 <400> SEQUENCE: 4
99 aggtcaagga caaggtgac 19
102 <210> SEQ ID NO: 5
103 <211> LENGTH: 21
104 <212> TYPE: DNA
105 <213> ORGANISM: Artificial Sequence
107 <220> FEATURE:
108 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
110 <400> SEQUENCE: 5
111 ccgatgaaaa tggaaagtat c 21
114 <210> SEQ ID NO: 6
115 <211> LENGTH: 21
116 <212> TYPE: DNA
117 <213> ORGANISM: Artificial Sequence
119 <220> FEATURE:
120 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
122 <400> SEQUENCE: 6
123 tccgttatct atactaaagt c 21
126 <210> SEQ ID NO: 7
127 <211> LENGTH: 21
128 <212> TYPE: DNA
129 <213> ORGANISM: Artificial Sequence
131 <220> FEATURE:
132 <223> OTHER INFORMATION: Description of Artificial Sequence: primer

RAW SEQUENCE LISTING DATE: 02/12/2003
PATENT APPLICATION: **US/09/147,405B** TIME: 18:36:20

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\02112003\I147405B.raw**

```
134 <400> SEQUENCE: 7
135 actgatcatg atgactttag t                                              21
138 <210> SEQ ID NO: 8
139 <211> LENGTH: 32
140 <212> TYPE: DNA
141 <213> ORGANISM: Artificial Sequence
143 <220> FEATURE:
144 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
146 <400> SEQUENCE: 8
147 gcggatccaa tcagtcaata aacaccgacg at                                   32
150 <210> SEQ ID NO: 9
151 <211> LENGTH: 32
152 <212> TYPE: DNA
153 <213> ORGANISM: Artificial Sequence
155 <220> FEATURE:
156 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
158 <400> SEQUENCE: 9
159 cggaattctg ttcggactga tttggaagtt cc                                   32
162 <210> SEQ ID NO: 10
163 <211> LENGTH: 1781
164 <212> TYPE: DNA
165 <213> ORGANISM: Staphylococcus epidermidis
167 <220> FEATURE:
168 <221> NAME/KEY: CDS
169 <222> LOCATION: (3)..(1781)
171 <400> SEQUENCE: 10
172 ac cac cac cac cac cac cac ccc tct agt gat gaa gaa aag aat gat    47
173    His His His His His His Pro Ser Ser Asp Glu Glu Lys Asn Asp
174      1               5                  10                  15
176 gtg atc aat aat aat cag tca ata aac acc gac gat aat aac caa ata   95
177 Val Ile Asn Asn Asn Gln Ser Ile Asn Thr Asp Asp Asn Asn Gln Ile
178                  20                  25                  30
180 att aaa aaa gaa gaa acg aat aac tac gat ggc ata gaa aaa cgc tca   143
181 Ile Lys Lys Glu Glu Thr Asn Asn Tyr Asp Gly Ile Glu Lys Arg Ser
182              35                  40                  45
184 gaa gat aga aca gag tca aca aca aat gta gat gaa aac gaa gca aca   191
185 Glu Asp Arg Thr Glu Ser Thr Thr Asn Val Asp Glu Asn Glu Ala Thr
186          50                  55                  60
188 ttt tta caa aag acc cct caa gat aat act cat ctt aca gaa gaa gag   239
189 Phe Leu Gln Lys Thr Pro Gln Asp Asn Thr His Leu Thr Glu Glu Glu
190      65                  70                  75
192 gta aaa gaa tcc tca tca gtc gaa tcc tca aat tca tca att gat act   287
193 Val Lys Glu Ser Ser Ser Val Glu Ser Ser Asn Ser Ser Ile Asp Thr
194  80                  85                  90                  95
196 gcc caa caa cca tct cac aca aca ata aat aga gaa gaa tct gtt caa   335
197 Ala Gln Gln Pro Ser His Thr Thr Ile Asn Arg Glu Glu Ser Val Gln
198                 100                 105                 110
200 aca agt gat aat gta gaa gat tca cac gta tca gat ttt gct aac tct   383
201 Thr Ser Asp Asn Val Glu Asp Ser His Val Ser Asp Phe Ala Asn Ser
```

RAW SEQUENCE LISTING DATE: 02/12/2003
PATENT APPLICATION: US/09/147,405B TIME: 18:36:20

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\02112003\I147405B.raw

```
202                 115                 120                 125
204 aaa ata aaa gag agt aac act gaa tct ggt aaa gaa gag aat act ata   431
205 Lys Ile Lys Glu Ser Asn Thr Glu Ser Gly Lys Glu Glu Asn Thr Ile
206         130                 135                 140
208 gag caa cct aat aaa gta aaa gaa gat tca aca aca agt cag ccg tct   479
209 Glu Gln Pro Asn Lys Val Lys Glu Asp Ser Thr Thr Ser Gln Pro Ser
210     145                 150                 155
212 ggc tat aca aat ata gat gaa aaa att tca aat caa gat gag tta tta   527
213 Gly Tyr Thr Asn Ile Asp Glu Lys Ile Ser Asn Gln Asp Glu Leu Leu
214 160                 165                 170                 175
216 aat tta cca ata aat gaa tat gaa aat aag gct aga cca tta tct aca   575
217 Asn Leu Pro Ile Asn Glu Tyr Glu Asn Lys Ala Arg Pro Leu Ser Thr
218                 180                 185                 190
220 aca tct gcc caa cca tcg att aaa cgt gta acc gta aat caa tta gcg   623
221 Thr Ser Ala Gln Pro Ser Ile Lys Arg Val Thr Val Asn Gln Leu Ala
222             195                 200                 205
224 gcg gaa caa ggt tcg aat gtt aac cat tta att aaa gtt act gat caa   671
225 Ala Glu Gln Gly Ser Asn Val Asn His Leu Ile Lys Val Thr Asp Gln
226         210                 215                 220
228 agt att act gaa gga tat gat gat agt gaa ggt gtt att aaa gca cat   719
229 Ser Ile Thr Glu Gly Tyr Asp Asp Ser Glu Gly Val Ile Lys Ala His
230     225                 230                 235
232 gat gct gaa aac tta atc tat gat gta act ttt gaa gta gat gat aag   767
233 Asp Ala Glu Asn Leu Ile Tyr Asp Val Thr Phe Glu Val Asp Asp Lys
234 240                 245                 250                 255
236 gtg aaa tct ggt gat acg atg aca gtg gat ata gat aag aat aca gtt   815
237 Val Lys Ser Gly Asp Thr Met Thr Val Asp Ile Asp Lys Asn Thr Val
238                 260                 265                 270
240 cca tca gat tta acc gat agc ttt aca ata cca aaa ata aaa gat aat   863
241 Pro Ser Asp Leu Thr Asp Ser Phe Thr Ile Pro Lys Ile Lys Asp Asn
242             275                 280                 285
244 tct gga gaa atc atc gct aca ggt act tat gat aac aaa aat aaa caa   911
245 Ser Gly Glu Ile Ile Ala Thr Gly Thr Tyr Asp Asn Lys Asn Lys Gln
246         290                 295                 300
248 atc acc tat act ttt aca gat tat gta gat aag tat gaa aat att aaa   959
249 Ile Thr Tyr Thr Phe Thr Asp Tyr Val Asp Lys Tyr Glu Asn Ile Lys
250     305                 310                 315
252 gca cac ctt aaa tta acg tca tac att gat aaa tca aag gtt cca aat  1007
253 Ala His Leu Lys Leu Thr Ser Tyr Ile Asp Lys Ser Lys Val Pro Asn
254 320                 325                 330                 335
256 aat aat acc aag tta gat gta gaa tat aaa acg gcc ctt tca tca gta  1055
257 Asn Asn Thr Lys Leu Asp Val Glu Tyr Lys Thr Ala Leu Ser Ser Val
258                 340                 345                 350
260 aat aaa aca att acg gtt gaa tat caa aga cct aac gaa aat cgg act  1103
261 Asn Lys Thr Ile Thr Val Glu Tyr Gln Arg Pro Asn Glu Asn Arg Thr
262             355                 360                 365
264 gct aac ctt caa agt atg ttt aca aat ata gat acg aaa aat cat aca  1151
265 Ala Asn Leu Gln Ser Met Phe Thr Asn Ile Asp Thr Lys Asn His Thr
266         370                 375                 380
```

RAW SEQUENCE LISTING DATE: 02/12/2003
PATENT APPLICATION: US/09/147,405B TIME: 18:36:20

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\02112003\I147405B.raw

```
268 gtt gag caa acg att tat att aac cct ctt cgt tat tca gcc aag gaa   1199
269 Val Glu Gln Thr Ile Tyr Ile Asn Pro Leu Arg Tyr Ser Ala Lys Glu
270     385                 390                 395
272 aca aat gta aat att tca ggg aat ggt gat gaa ggt tca aca att ata   1247
273 Thr Asn Val Asn Ile Ser Gly Asn Gly Asp Glu Gly Ser Thr Ile Ile
274 400                 405                 410                 415
276 gac gat agc aca ata att aaa gtt tat aag gtt gga gat aat caa aat   1295
277 Asp Asp Ser Thr Ile Ile Lys Val Tyr Lys Val Gly Asp Asn Gln Asn
278                 420                 425                 430
280 tta cca gat agt aac aga att tat gat tac agt gaa tat gaa gat gtc   1343
281 Leu Pro Asp Ser Asn Arg Ile Tyr Asp Tyr Ser Glu Tyr Glu Asp Val
282             435                 440                 445
284 aca aat gat gat tat gcc caa tta gga aat aat aat gat gtg aat att   1391
285 Thr Asn Asp Asp Tyr Ala Gln Leu Gly Asn Asn Asn Asp Val Asn Ile
286         450                 455                 460
288 aat ttt ggt aat ata gat tca cca tat att att aaa gtt att agt aaa   1439
289 Asn Phe Gly Asn Ile Asp Ser Pro Tyr Ile Ile Lys Val Ile Ser Lys
290     465                 470                 475
292 tat gac cct aat aag gat gat tac acg act ata cag caa act gtg aca   1487
293 Tyr Asp Pro Asn Lys Asp Asp Tyr Thr Thr Ile Gln Gln Thr Val Thr
294 480                 485                 490                 495
296 atg cag acg act ata aat gag tat act ggt gag ttt aga aca gca tcc   1535
297 Met Gln Thr Thr Ile Asn Glu Tyr Thr Gly Glu Phe Arg Thr Ala Ser
298                 500                 505                 510
300 tat gat aat aca att gct ttc tct aca agt tca ggt caa gga caa ggt   1583
301 Tyr Asp Asn Thr Ile Ala Phe Ser Thr Ser Ser Gly Gln Gly Gln Gly
302             515                 520                 525
304 gac ttg cct cct gaa aaa act tat aaa atc gga gat tac gta tgg gaa   1631
305 Asp Leu Pro Pro Glu Lys Thr Tyr Lys Ile Gly Asp Tyr Val Trp Glu
306         530                 535                 540
308 gat gta gat aaa gat ggt att caa aat aca aat gat aat gaa aaa ccg   1679
309 Asp Val Asp Lys Asp Gly Ile Gln Asn Thr Asn Asp Asn Glu Lys Pro
310     545                 550                 555
312 ctt agt aat gta ttg gta act ttg acg tat cct gat gga act tca aaa   1727
313 Leu Ser Asn Val Leu Val Thr Leu Thr Tyr Pro Asp Gly Thr Ser Lys
314 560                 565                 570                 575
316 tca gtc aga aca gat gaa gat ggg aaa tat caa ttt gat ggg gtg cag   1775
317 Ser Val Arg Thr Asp Glu Asp Gly Lys Tyr Gln Phe Asp Gly Val Gln
318                 580                 585                 590
320 gtc gac                                                         1781
321 Val Asp
324 <210> SEQ ID NO: 11
325 <211> LENGTH: 593
326 <212> TYPE: PRT
327 <213> ORGANISM: Staphylococcus epidermidis
329 <400> SEQUENCE: 11
330 His His His His His His Pro Ser Ser Asp Glu Glu Lys Asn Asp Val
331   1               5                  10                  15
333 Ile Asn Asn Asn Gln Ser Ile Asn Thr Asp Asp Asn Asn Gln Ile Ile
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 02/12/2003
PATENT APPLICATION: **US/09/147,405B** TIME: 18:36:21

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\02112003\I147405B.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 3,6,9,12,15,18

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
Seq#:1; Line(s) 24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39
Seq#:2; Line(s) 40,41,42,43,44,45,46,47,48,49,50,51
Seq#:3; Line(s) 52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71
Seq#:3; Line(s) 72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90
Seq#:4; Line(s) 91,92,93,94,95,96,97,98,99,100,101,102
Seq#:5; Line(s) 103,104,105,106,107,108,109,110,111,112,113,114
Seq#:6; Line(s) 115,116,117,118,119,120,121,122,123,124,125,126
Seq#:7; Line(s) 127,128,129,130,131,132,133,134,135,136,137,138
Seq#:8; Line(s) 139,140,141,142,143,144,145,146,147,148,149,150
Seq#:9; Line(s) 151,152,153,154,155,156,157,158,159,160,161,162
Seq#:10; Line(s) 163,164,165,166,167,168,169,170,171,172,173,174,175,176
Seq#:10; Line(s) 177,178,179,180,181,182,183,184,185,186,187,188,189,190
Seq#:10; Line(s) 191,192,193,194,195,196,197,198,199,200,201,202,203,204
Seq#:10; Line(s) 205,206,207,208,209,210,211,212,213,214,215,216,217,218
Seq#:10; Line(s) 219,220,221,222,223,224,225,226,227,228,229,230,231,232
Seq#:10; Line(s) 233,234,235,236,237,238,239,240,241,242,243,244,245,246
Seq#:10; Line(s) 247,248,249,250,251,252,253,254,255,256,257,258,259,260
Seq#:10; Line(s) 261,262,263,264,265,266,267,268,269,270,271,272,273,274
Seq#:10; Line(s) 275,276,277,278,279,280,281,282,283,284,285,286,287,288
Seq#:10; Line(s) 289,290,291,292,293,294,295,296,297,298,299,300,301,302
Seq#:10; Line(s) 303,304,305,306,307,308,309,310,311,312,313,314,315,316
Seq#:10; Line(s) 317,318,319,320,321,322,323,324
Seq#:11; Line(s) 325,326,327,328,329,330,331,332,333,334,335,336,337,338
Seq#:11; Line(s) 339,340,341,342,343,344,345,346,347,348,349,350,351,352
Seq#:11; Line(s) 353,354,355,356,357,358,359,360,361,362,363,364,365,366
Seq#:11; Line(s) 367,368,369,370,371,372,373,374,375,376,377,378,379,380
Seq#:11; Line(s) 381,382,383,384,385,386,387,388,389,390,391,392,393,394
Seq#:11; Line(s) 395,396,397,398,399,400,401,402,403,404,405,406,407,408
Seq#:11; Line(s) 409,410,411,412,413,414,415,416,417,418,419,420,421,422
Seq#:11; Line(s) 423,424,425,426,427,428,429,430,431,432,433,434,435,436
Seq#:11; Line(s) 437,438,439,440,441,442,443,444,445
Seq#:12; Line(s) 446,447,448,449,450,451,452,453,454,455,456,457,458,459
Seq#:12; Line(s) 460,461,462,463,464,465,466,467,468,469,470,471,472,473
Seq#:12; Line(s) 474,475,476,477,478,479,480,481,482,483,484,485,486,487
Seq#:12; Line(s) 488,489,490,491,492,493,494,495,496,497,498,499,500,501
Seq#:12; Line(s) 502,503,504,505,506,507,508,509,510,511,512
Seq#:13; Line(s) 513,514,515,516,517,518,519,520,521,522,523,524,525,526

1600

RAW SEQUENCE LISTING DATE: 02/10/2003
PATENT APPLICATION: **US/09/147,405B** TIME: 13:15:33

Input Set : **A:\Guss405.app**
Output Set: **N:\CRF4\02102003\I147405B.raw**

```
 3 <110> APPLICANT: Guss, Bengt
 4       Nilsson, Martin
 5       Frykberg, Lars
 6       Flock, Jan-Ingmar
 7       Lindberg, Martin
 9 <120> TITLE OF INVENTION: Fibrinogen Binding Protein Originating from
10       Coagulase-Negative Staphylococcus
12 <130> FILE REFERENCE: guss 09/147405
14 <140> CURRENT APPLICATION NUMBER: 09/147405B
C--> 15 <141> CURRENT FILING DATE: 1999-04-11
17 <150> PRIOR APPLICATION NUMBER: PCT/SE97/10191
18 <151> PRIOR FILING DATE: 1997-06-18
20 <150> PRIOR APPLICATION NUMBER: SE 9602496-3
21 <151> PRIOR FILING DATE: 1996-06-20
23 <160> NUMBER OF SEQ ID NOS: 15
25 <170> SOFTWARE: PatentIn Ver. 2.0
```

Does Not Comply
Corrected Diskette Needed

ERRORED SEQUENCES

```
927 <210> SEQ ID NO: 15
928 <211> LENGTH: 1092
929 <212> TYPE: PRT
930 <213> ORGANISM: Staphylococcus epidermidis
932 <400> SEQUENCE: 15
933 Met Ile Asn Lys Lys Asn Asn Leu Leu Thr Lys Lys Lys Pro Ile Ala
934   1               5                  10                  15
936 Asn Lys Ser Asn Lys Tyr Ala Ile Arg Lys Phe Thr Val Gly Thr Ala
937              20                  25                  30
939 Ser Ile Val Ile Gly Ala Thr Leu Leu Phe Gly Leu Gly His Asn Glu
940          35                  40                  45
942 Ala Lys Ala Glu Glu Asn Ser Val Gln Asp Val Lys Asp Ser Asn Thr
943      50                  55                  60
945 Asp Asp Glu Leu Ser Asp Ser Asn Asp Gln Ser Ser Asp Glu Glu Lys
946  65                  70                  75                  80
948 Asn Asp Val Ile Asn Asn Asn Gln Ser Ile Asn Thr Asp Asp Asn Asn
949                  85                  90                  95
951 Gln Ile Ile Lys Lys Glu Glu Thr Asn Asn Tyr Asp Gly Ile Glu Lys
952              100                 105                 110
954 Arg Ser Glu Asp Arg Thr Glu Ser Thr Thr Asn Val Asp Glu Asn Glu
955          115                 120                 125
957 Ala Thr Phe Leu Gln Lys Thr Pro Gln Asp Asn Thr His Leu Thr Glu
958      130                 135                 140
```

RAW SEQUENCE LISTING DATE: 02/10/2003
PATENT APPLICATION: **US/09/147,405B** TIME: 13:15:33

Input Set : **A:\Guss405.app**
Output Set: **N:\CRF4\02102003\I147405B.raw**

```
960 Glu Glu Val Lys Glu Ser Ser Ser Val Glu Ser Ser Asn Ser Ser Ile
961 145                 150                 155                 160
963 Asp Thr Ala Gln Gln Pro Ser His Thr Thr Ile Asn Arg Glu Glu Ser
964                 165                 170                 175
966 Val Gln Thr Ser Asp Asn Val Glu Asp Ser His Val Ser Asp Phe Ala
967             180                 185                 190
969 Asn Ser Lys Ile Lys Glu Ser Asn Thr Glu Ser Gly Lys Glu Glu Asn
970         195                 200                 205
972 Thr Ile Glu Gln Pro Asn Lys Val Lys Glu Asp Ser Thr Thr Ser Gln
973     210                 215                 220
975 Pro Ser Gly Tyr Thr Asn Ile Asp Glu Lys Ile Ser Asn Gln Asp Glu
976 225                 230                 235                 240
978 Leu Leu Asn Leu Pro Ile Asn Glu Tyr Glu Asn Lys Ala Arg Pro Leu
979                 245                 250                 255
981 Ser Thr Thr Ser Ala Gln Pro Ser Ile Lys Arg Val Thr Val Asn Gln
982             260                 265                 270
984 Leu Ala Ala Glu Gln Gly Ser Asn Val Asn His Leu Ile Lys Val Thr
985         275                 280                 285
987 Asp Gln Ser Ile Thr Glu Gly Tyr Asp Asp Ser Glu Gly Val Ile Lys
988     290                 295                 300
990 Ala His Asp Ala Glu Asn Leu Ile Tyr Asp Val Thr Phe Glu Val Asp
991 305                 310                 315                 320
993 Asp Lys Val Lys Ser Gly Asp Thr Met Thr Val Asp Ile Asp Lys Asn
994                 325                 330                 335
996 Thr Val Pro Ser Asp Leu Thr Asp Ser Phe Thr Ile Pro Lys Ile Lys
997             340                 345                 350
999 Asp Asn Ser Gly Glu Ile Ile Ala Thr Gly Thr Tyr Asp Asn Lys Asn
1000         355                 360                 365
1002 Lys Gln Ile Thr Tyr Thr Phe Thr Asp Tyr Val Asp Lys Tyr Glu Asn
1003     370                 375                 380
1005 Ile Lys Ala His Leu Lys Leu Thr Ser Tyr Ile Asp Lys Ser Lys Val
1006 385                 390                 395                 400
1008 Pro Asn Asn Asn Thr Lys Leu Asp Val Glu Tyr Lys Thr Ala Leu Ser
1009                 405                 410                 415
1011 Ser Val Asn Lys Thr Ile Thr Val Glu Tyr Gln Arg Pro Asn Glu Asn
1012             420                 425                 430
1014 Arg Thr Ala Asn Leu Gln Ser Met Phe Thr Asn Ile Asp Thr Lys Asn
1015         435                 440                 445
1017 His Thr Val Glu Gln Thr Ile Tyr Ile Asn Pro Leu Arg Tyr Ser Ala
1018     450                 455                 460
1020 Lys Glu Thr Asn Val Asn Ile Ser Gly Asn Gly Asp Glu Gly Ser Thr
1021 465                 470                 475                 480
1023 Ile Ile Asp Asp Ser Thr Ile Ile Lys Val Tyr Lys Val Gly Asp Asn
1024                 485                 490                 495
1026 Gln Asn Leu Pro Asp Ser Asn Arg Ile Tyr Asp Tyr Ser Glu Tyr Glu
1027             500                 505                 510
1029 Asp Val Thr Asn Asp Asp Tyr Ala Gln Leu Gly Asn Asn Asn Asp Val
1030         515                 520                 525
1032 Asn Ile Asn Phe Gly Asn Ile Asp Ser Pro Tyr Ile Ile Lys Val Ile
```

RAW SEQUENCE LISTING DATE: 02/10/2003
PATENT APPLICATION: **US/09/147,405B** TIME: 13:15:33

Input Set : **A:\Guss405.app**
Output Set: **N:\CRF4\02102003\I147405B.raw**

```
1033     530                 535                 540
1035 Ser Lys Tyr Asp Pro Asn Lys Asp Asp Tyr Thr Thr Ile Gln Gln Thr
1036 545                 550                 555                 560
1038 Val Thr Met Gln Thr Thr Ile Asn Glu Tyr Thr Gly Glu Phe Arg Thr
1039                 565                 570                 575
1041 Ala Ser Tyr Asp Asn Thr Ile Ala Phe Ser Thr Ser Ser Gly Gln Gly
1042             580                 585                 590
1044 Gln Gly Asp Leu Pro Pro Glu Lys Thr Tyr Lys Ile Gly Asp Tyr Val
1045         595                 600                 605
1047 Trp Glu Asp Val Asp Lys Asp Gly Ile Gln Asn Thr Asn Asp Asn Glu
1048     610                 615                 620
1050 Lys Pro Leu Ser Asn Val Leu Val Thr Leu Thr Tyr Pro Asp Gly Thr
1051 625                 630                 635                 640
1053 Ser Lys Ser Val Arg Thr Asp Glu Asp Gly Lys Tyr Gln Phe Asp Gly
1054                 645                 650                 655
1056 Leu Lys Asn Gly Leu Thr Tyr Lys Ile Thr Phe Glu Thr Pro Glu Gly
1057             660                 665                 670
1059 Tyr Thr Pro Thr Leu Lys His Ser Gly Thr Asn Pro Ala Leu Asp Ser
1060         675                 680                 685
1062 Glu Gly Asn Ser Val Trp Val Thr Ile Asn Gly Gln Asp Asp Met Thr
1063     690                 695                 700
1065 Ile Asp Ser Gly Phe Tyr Gln Thr Pro Lys Tyr Ser Leu Gly Asn Tyr
1066 705                 710                 715                 720
1068 Val Trp Tyr Asp Thr Asn Lys Asp Gly Ile Gln Gly Asp Asp Glu Lys
1069                 725                 730                 735
1071 Gly Ile Ser Gly Val Lys Val Thr Leu Lys Asp Glu Asn Gly Asn Ile
1072             740                 745                 750
1074 Ile Ser Thr Thr Thr Thr Asp Glu Asn Gly Lys Tyr Gln Phe Asp Asn
1075         755                 760                 765
1077 Leu Asn Ser Gly Asn Tyr Ile Val His Phe Asp Lys Pro Ser Gly Met
1078     770                 775                 780
1080 Thr Gln Thr Thr Thr Asp Ser Gly Asp Asp Asp Glu Gln Asp Ala Asp
1081 785                 790                 795                 800
1083 Gly Glu Glu Val His Val Thr Ile Thr Asp His Asp Asp Phe Ser Ile
1084                 805                 810                 815
1086 Asp Asn Gly Tyr Tyr Asp Asp Glu Ser Asp Ser Asp Ser Asp Ser Asp
1087             820                 825                 830
1089 Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp
1090         835                 840                 845
1092 Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp
1093     850                 855                 860
1095 Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp
1096 865                 870                 875                 880
1098 Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp
1099                 885                 890                 895
1101 Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp
1102             900                 905                 910
1104 Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp
1105         915                 920                 925
```

RAW SEQUENCE LISTING DATE: 02/10/2003
PATENT APPLICATION: **US/09/147,405B** TIME: 13:15:33

Input Set : **A:\Guss405.app**
Output Set: **N:\CRF4\02102003\I147405B.raw**

```
1107 Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp
1108     930                 935                 940
1110 Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp
1111 945                 950                 955                 960
1113 Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp
1114                 965                 970                 975
1116 Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp
1117             980                 985                 990
1119 Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp
1120         995                 1000                1005
1122 Ser Asp Ser Val Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Gly
1123    1010                1015                1020
1125 Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Asn Asp Ser Asp
E--> 1126 (025) 1025        1030                1035                1040
1128 Leu Gly Asn Ser Ser Asp Lys Ser Thr Lys Asp Lys Leu Pro Asp Thr
1129                1045                1050                1055
1131 Gly Ala Asn Glu Asp Tyr Gly Ser Lys Gly Thr Leu Leu Gly Thr Leu
1132            1060                1065                1070
1134 Phe Ala Gly Leu Gly Ala Leu Leu Leu Gly Lys Arg Arg Lys Asn Arg
1135        1075                1080                1085
1137 Lys Asn Lys Asn
1138    1090
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 02/10/2003
PATENT APPLICATION: **US/09/147,405B** TIME: 13:15:34

Input Set : **A:\Guss405.app**
Output Set: **N:\CRF4\02102003\I147405B.raw**

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
Seq#:1; Line(s) 24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39
Seq#:2; Line(s) 40,41,42,43,44,45,46,47,48,49,50,51
Seq#:3; Line(s) 52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71
Seq#:3; Line(s) 72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90
Seq#:4; Line(s) 91,92,93,94,95,96,97,98,99,100,101,102
Seq#:5; Line(s) 103,104,105,106,107,108,109,110,111,112,113,114
Seq#:6; Line(s) 115,116,117,118,119,120,121,122,123,124,125,126
Seq#:7; Line(s) 127,128,129,130,131,132,133,134,135,136,137,138
Seq#:8; Line(s) 139,140,141,142,143,144,145,146,147,148,149,150
Seq#:9; Line(s) 151,152,153,154,155,156,157,158,159,160,161,162
Seq#:10; Line(s) 163,164,165,166,167,168,169,170,171,172,173,174,175,176
Seq#:10; Line(s) 177,178,179,180,181,182,183,184,185,186,187,188,189,190
Seq#:10; Line(s) 191,192,193,194,195,196,197,198,199,200,201,202,203,204
Seq#:10; Line(s) 205,206,207,208,209,210,211,212,213,214,215,216,217,218
Seq#:10; Line(s) 219,220,221,222,223,224,225,226,227,228,229,230,231,232
Seq#:10; Line(s) 233,234,235,236,237,238,239,240,241,242,243,244,245,246
Seq#:10; Line(s) 247,248,249,250,251,252,253,254,255,256,257,258,259,260
Seq#:10; Line(s) 261,262,263,264,265,266,267,268,269,270,271,272,273,274
Seq#:10; Line(s) 275,276,277,278,279,280,281,282,283,284,285,286,287,288
Seq#:10; Line(s) 289,290,291,292,293,294,295,296,297,298,299,300,301,302
Seq#:10; Line(s) 303,304,305,306,307,308,309,310,311,312,313,314,315,316
Seq#:10; Line(s) 317,318,319,320,321,322,323,324
Seq#:11; Line(s) 325,326,327,328,329,330,331,332,333,334,335,336,337,338
Seq#:11; Line(s) 339,340,341,342,343,344,345,346,347,348,349,350,351,352
Seq#:11; Line(s) 353,354,355,356,357,358,359,360,361,362,363,364,365,366
Seq#:11; Line(s) 367,368,369,370,371,372,373,374,375,376,377,378,379,380
Seq#:11; Line(s) 381,382,383,384,385,386,387,388,389,390,391,392,393,394
Seq#:11; Line(s) 395,396,397,398,399,400,401,402,403,404,405,406,407,408
Seq#:11; Line(s) 409,410,411,412,413,414,415,416,417,418,419,420,421,422
Seq#:11; Line(s) 423,424,425,426,427,428,429,430,431,432,433,434,435,436
Seq#:11; Line(s) 437,438,439,440,441,442,443,444,445
Seq#:12; Line(s) 446,447,448,449,450,451,452,453,454,455,456,457,458,459
Seq#:12; Line(s) 460,461,462,463,464,465,466,467,468,469,470,471,472,473
Seq#:12; Line(s) 474,475,476,477,478,479,480,481,482,483,484,485,486,487
Seq#:12; Line(s) 488,489,490,491,492,493,494,495,496,497,498,499,500,501
Seq#:12; Line(s) 502,503,504,505,506,507,508,509,510,511,512
Seq#:13; Line(s) 513,514,515,516,517,518,519,520,521,522,523,524,525,526
Seq#:13; Line(s) 527,528,529,530,531,532,533,534,535,536,537,538,539,540
Seq#:13; Line(s) 541,542,543,544,545,546,547,548,549,550,551,552,553,554
Seq#:13; Line(s) 555,556,557,558,559,560,561,562,563,564,565,566,567,568
Seq#:13; Line(s) 569,570,571,572,573,574,575,576,577,578,579,580,581,582
Seq#:13; Line(s) 583,584,585,586,587,588,589,590,591,592,593,594,595,596

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 02/10/2003
PATENT APPLICATION: **US/09/147,405B** TIME: 13:15:34

Input Set : **A:\Guss405.app**
Output Set: **N:\CRF4\02102003\I147405B.raw**

Seq#:13; Line(s) 597,598,599,600,601,602,603,604,605,606,607,608,609,610
Seq#:13; Line(s) 611,612,613,614,615,616,617,618,619,620,621,622,623,624
Seq#:13; Line(s) 625,626,627,628,629,630
Seq#:14; Line(s) 631,632,633,634,635,636,637,638,639,640,641,642,643,644
Seq#:14; Line(s) 645,646,647,648,649,650,651,652,653,654,655,656,657,658
Seq#:14; Line(s) 659,660,661,662,663,664,665,666,667,668,669,670,671,672
Seq#:14; Line(s) 673,674,675,676,677,678,679,680,681,682,683,684,685,686
Seq#:14; Line(s) 687,688,689,690,691,692,693,694,695,696,697,698,699,700

VERIFICATION SUMMARY DATE: 02/10/2003
PATENT APPLICATION: **US/09/147,405B** TIME: 13:15:34

Input Set : **A:\Guss405.app**
Output Set: **N:\CRF4\02102003\I147405B.raw**

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:87 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:1126 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:15